

Title (en)
IMAGE PROCESSING APPARATUS AND OPERATING METHOD THEREFOR

Title (de)
BILDVERARBEITUNGSVORRICHTUNG UND BETRIEBSVERFAHREN DAFÜR

Title (fr)
APPAREIL DE TRAITEMENT D'IMAGE ET SON PROCÉDÉ DE FONCTIONNEMENT

Publication
EP 4276744 A4 20240717 (EN)

Application
EP 22763484 A 20220211

Priority

- KR 20210029088 A 20210304
- KR 20210093137 A 20210715
- KR 2022002064 W 20220211

Abstract (en)
[origin: US2022284565A1] An image processing apparatus and a method of operating the same are provided. The method includes: a memory storing one or more instructions; and a processor configured to execute the one or more instructions stored in the memory to obtain first frequency coefficient information by converting a first image into a frequency domain in units of blocks having a preset size, obtain correlation information indicating a correlation between at least one block of the first frequency coefficient information and a first kernel, generate a weight corresponding to the first frequency coefficient information based on the correlation information, generate second frequency coefficient information by rearranging coefficients included in the first frequency coefficient information, wherein the one or more of the coefficients having a same frequency is arranged into a same group, and obtain quality information of the first image based on the weight and the second frequency coefficient information.

IPC 8 full level
G06T 7/00 (2017.01)

CPC (source: EP US)
G06T 7/0002 (2013.01 - EP US); **G06T 2207/10024** (2013.01 - EP US); **G06T 2207/20021** (2013.01 - EP US);
G06T 2207/20052 (2013.01 - EP US); **G06T 2207/20076** (2013.01 - EP US); **G06T 2207/20081** (2013.01 - EP); **G06T 2207/20084** (2013.01 - EP);
G06T 2207/30168 (2013.01 - EP US)

Citation (search report)

- [A] SEBASTIAN BOSSE ET AL: "Deep Neural Networks for No-Reference and Full-Reference Image Quality Assessment", ARXIV.ORG, CORNELL UNIVERSITY LIBRARY, 201 OLIN LIBRARY CORNELL UNIVERSITY ITHACA, NY 14853, 6 December 2016 (2016-12-06), XP080737072, DOI: 10.1109/TIP.2017.2760518
- [A] RUBEL ANDRII ET AL: "Improved Noisy Image Quality Assessment Using Multilayer Neural Networks", 2019 IEEE 2ND UKRAINE CONFERENCE ON ELECTRICAL AND COMPUTER ENGINEERING (UKRCON), IEEE, 2 July 2019 (2019-07-02), pages 1046 - 1051, XP033639925, DOI: 10.1109/UKRCON.2019.8879950
- See also references of WO 2022186500A1

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)
US 2022284565 A1 20220908; EP 4276744 A1 20231115; EP 4276744 A4 20240717

DOCDB simple family (application)
US 202217687227 A 20220304; EP 22763484 A 20220211